

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1       1. (Currently Amended) A method of effecting secure communications between a  
2 server and a client, the server executed in a server computer, the method comprising:  
3           detecting, at the server computer, a client connection at a first port;  
4           providing, by the server computer, the client with a decoy port number; and  
5           providing, by the server computer, services to the client on a second port having a second  
6           port number that is mapped to the decoy port number, wherein the second port  
7           number is different from the decoy port number.

1       2. (Currently Amended) A method as defined in Claim 1, wherein the decoy port  
2 number is provided to the client by the operation of a routine that is associated with the server,  
3 the routine executed in the server computer.

1       3. (Original) A method as defined in Claim 2, further comprising:  
2           launching the server on the second port; and  
3           monitoring the second port for a connection by the client.

1       4. (Original) A method as defined in Claim 3, further comprising;  
2           if there is no connection by the client within a predetermined time interval, terminating  
3 execution of the server on the second port.

1       5. (Currently Amended) A method as defined in Claim 2, further comprising:  
2           maintaining, in the server computer, a table of available decoy port numbers that are  
3           mapped to valid port numbers.

1       6. (Currently Amended) A method as defined in Claim 5, ~~further comprising:~~  
2       ~~subsequent to providing the decoy port number to the client, launching the server on the~~  
3       ~~second port wherein the table maintained in the server computer corresponds to a~~  
4       ~~second table maintained at a client computer on which the client is executed, the~~  
5       ~~second table mapping decoy numbers to valid port numbers at the client~~  
6       ~~computer.~~

1       7. (Original) A method as defined in Claim 6, further comprising:  
2       monitoring the second port for a connection by the client, and  
3       if there is no connection by the client within a predetermined time interval, terminating  
4       execution of the server on the second port.

1       8. (Cancelled)

1       9. (Currently Amended) A computer system comprising:  
2       a plurality of ports, each port having a respective port number;  
3       a server application; and  
4       a routine that, if executed, is operative to:  
5           detect a client connection at a first port;  
6           provide the client with a decoy port number; and  
7           provide services to the client on a second port having a second port number that is  
8           mapped to the decoy port number, wherein the second port number is  
9           different from the decoy port number.

1       10. (Original) A computer system as defined in Claim 9, wherein the routine, if  
2       executed, is operative to:  
3           launch the server application on the second port; and  
4           monitor the second port for a connection by the client.

1        11. (Original) A computer system as defined in Claim 10, wherein the routine, if  
2 executed, is operative to terminate execution of the server application on the second port if there  
3 is no connection by the client within a predetermined time interval.

1        12. (Currently Amended) A computer system as defined in Claim 9, wherein the  
2 routine, if executed, is operative to maintain a table of decoy port numbers ~~and wherein each of a~~  
3 ~~plurality of decoy port numbers and is mapped to [[a]] corresponding valid port numbers~~  
4 ~~number.~~

1        13. (Original) A computer system as defined in Claim 12, wherein the routine, if  
2 executed, is operative to:

3              launch the server application on the second port subsequent to providing the decoy port  
4              number to the client.

1        14. (Cancelled)

1       15. (Currently Amended) A server computer system comprising:  
2       a plurality of ports, each port having a respective port number;  
3       a first server application; and  
4       a first routine that is associated with the first server application and that, if executed, is  
5       operative to:  
6       detect a client connection at a first port;  
7       provide the client with transmit a decoy port number to the client;  
8       terminate the connection to the first port; and  
9       provide services to the client on a second port having a second port number that is  
10      mapped to the decoy port number, the second port number being a valid  
11      port number that is different from the decoy port number;  
12      a second server application; and  
13      a second routine that is associated with the second server application and that, if  
14       executed, is operative to:  
15       detect a client connection at a third port;  
16       provide the client with transmit a second decoy port number to the client;  
17       terminate the connection to the third port; and  
18       provide services to the client on a fourth port having a fourth port number  
19       that is mapped to the second decoy port number, the fourth part  
20       number being another valid port number that is different from the  
21       second decoy port number.

1       16. (Currently Amended) A server computer system as defined in Claim 15, wherein  
2       the first routine and the second routine, if executed are operable, respectively, to:  
3       terminate execution of the first server application on the second port if there is no client  
4       connection within a predetermined time interval; and  
5       terminate execution of the second server application on the fourth port if there is no client  
6       connection within a predetermined time interval.

1       17. (Currently Amended) A method executed by a client computer, comprising:  
2       attempting to access a server application on a first port of a server computer;  
3       receiving, from the server computer, a decoy port number that is an invalid port number;  
4       translating the decoy port number to a translated valid port number; and  
5       connecting to the server application on the translated valid port number.

1       18. (Currently Amended) A method as defined in Claim 17, wherein the decoy port  
2       number is translated using a wrapper script associated with a client application in the client  
3       computer.

1       19. (Currently Amended) A method as defined in Claim 17, wherein the decoy port  
2       number is translated using code embedded in a client application in the client computer.

1       20. (Currently Amended) A method as defined in Claim 17, further comprising:  
2       mapping the decoy port number to an intermediate port number; and  
3       effecting an offset to the intermediate port number to produce the valid port number.

1       21. (Currently Amended) A computer system comprising:  
2       a plurality of ports, each port having a respective port number;  
3       an application; and  
4       means for effecting secure access to the application by redirecting a client from a first  
5       port to a second port, wherein the means for effecting secure access comprises:  
6       a routine that, if executed, is operable to provide the client with a decoy port number that  
7       maps to a second port number of the second port, wherein the decoy port number is an invalid  
8       port number and the second port number is a valid port number.

1       22. (Cancelled)

1        23. (Currently Amended) An article comprising a machine-readable storage medium  
2 that comprises instructions that, if executed, ~~are operable~~ cause a server computer to:  
3              detect a connection at a first port of the server computer by a client application;  
4              ~~provide transmit,~~ to the client application, [[with]] a decoy port number, wherein the  
5 decoy port number is an invalid port number; and  
6              cause a server application in the server computer to be launched at a second port that  
7              [[is]] has a second port number mapped to the decoy port number, the second port  
8              number being a valid port number.

1        24. (Original) An article as defined in Claim 23, further comprising instructions, that,  
2 if executed, are operable to:  
3              monitor the second port; and  
4              if there is no connection by the client application within a predetermined time interval,  
5              terminate execution of the server on the second port.

1        25. (Original) An article as defined in Claim 23, wherein the storage medium further  
2 comprises a table of decoy port numbers that are mapped to valid port numbers.

1        26. (Cancelled)

1        27. (Currently Amended) A client/server architecture system comprising:  
2              a server computer system; and  
3              a server application installed on the sever computer system and comprising instructions  
4              that, if executed on the server computer system, are effective to:  
5              detect a connection at a first port by a client application;  
6              ~~provide transmit,~~ to the client application, [[with]] a decoy port number, wherein  
7              the decoy port number is an invalid port number;  
8              terminate the connection on the first port; and  
9              provide services to the client application on a second port having a second port  
10             number that is mapped to the decoy port number.

1           28. (Currently Amended) A client/server ~~architecture~~ system as defined in Claim 27,  
2 further comprising:

3           a client computer system; and  
4           a client application installed on the client computer system and comprising instructions  
5           that, if executed on the client computer system, are effective to:  
6           attempt to access the server application on the first port;  
7           translate the decoy port number to the second port number; and  
8           connect to the server application on the second port.

1           29. (Cancelled)

1           30. (Currently Amended) A client/server ~~architecture~~ system as defined in Claim 28,  
2 wherein the client application further comprises instructions that, if executed on the client  
3 computer system, are effective to:

4           map the decoy port number to an intermediate port number; and  
5           impart an offset to the intermediate port number so as to derive the second port number.

1           31. (New) The method as defined in Claim 1, wherein providing the decoy port  
2 number comprises providing the decoy port number that has no meaning to an unauthorized  
3 client computer, but the decoy port number is mappable to the second port number by an  
4 authorized client computer.

1           32. (New) The computer system as defined in Claim 12, wherein the decoy port  
2 number provided to the client enables the client to map, using a second table associated with the  
3 client, the decoy port number to the second port number such that the client can connect to the  
4 computer system at the second port number.

1       33. (New) The computer system as defined in Claim 9, wherein the decoy port  
2 number has no meaning to an unauthorized client computer, but the decoy port number is  
3 mappable to the second port number by an authorized client computer.

1       34. (New) The article of Claim 23, wherein the decoy port number is meaningless to  
2 an unauthorized client computer, but the decoy port number is mappable to the valid port number  
3 by an authorized client computer.